



Fermilab

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Beams Division/Electron Cooling

October 17, 2003

MEMO TO: Distribution

FROM: Jerry Leibfritz
Project Manager

SUBJECT: **SEPTEMBER MONTHLY REPORT
MI-31
FESS/Engineering Project No. 6-6-44**

Please find attached the September 2003 monthly report for this project.

Enclosure

Distribution:

- P. Philp/MS 118
- M. Witherell/MS 105
- K. Stanfield/ MS 105
- S. Holmes/MS 105
- E. Temple/ MS 200
- J. Brown/MS 200
- H. Dick/ MS 306
- D. Carlson/MS 211
- C. Trimby/MS 212
- D. Nevin/MS 214
- E. Crumpley/MS 214
- S. Nagaitsev/ MS 307
- J. Sims/MS 214
- T. Prosapio/MS 214
- J. Spalding/MS 341
- R. Stefanski/MS 122
- Project File 6-6-44
- Chrono File

REPORTING PERIOD: September 2003

I. PROGRESS

1.1 General Construction

- a. Activity – Primary work activities included placement of cast in place structural concrete walls, backfilling, shielding steel placement, sawcutting (and bulkheading) of the MI enclosure, and forming and pouring of connecting enclosure base slab and walls. The shut down (MS 5) activities began on 9/8/03 and continued throughout this month.
- b. Cumulative hours worked – approximately 9700 hours through 9/30/03.
- c. Subcontractor's schedule evaluation – As of 09/30/03 the Subcontractor is approximately 2 weeks ahead of schedule for critical path activities and 1.5 weeks ahead for MS 5 shutdown related activities. The Subcontractor's fourth payment update occurred on September 3, 2003 including payment for milestones 1H and 1I. See attached earned value reports and section II of this report for an earned value analysis. The Whittakers Subcontract is approximately 46% complete as of 9/30/03.
- d. Engineering Change Proposals/ Requests – See latest ECP list on Website. Supplemental Agreement numbers 1, 2, 3, 4 and 5 have been incorporated into the Subcontract. At this time the total subcontract amount is \$2,635,536 and the completion date is 03/29/04.
- e. Upcoming issues –More backfilling, spread footing and wall construction, and plumbing and electrical rough in. Structural steel is anticipated for delivery and erection in the last week of October.
- f. Photographs:





1.2 Project Support

- a. Efforts this month were spent on review of submittals, field supervision and construction administration related activities. Please note that EDIA for Administration is higher than budgeted this month for two reasons. First the shut down related activities required more field supervision than originally planned and second, the FESS Chargebacks were accounted from 8/21/03 to 9/30/03 (more than one month) because of fiscal year end close out requirements. Octobers EDIA should be less than anticipated to partially offset the overrun.

SCHEDULE INFORMATION AND MILESTONES:

MILESTONE	DEFINITION	BASELINE	PEP Dates	Latest Estimates
Start Project	Directive signed	30 May 02	30 May 02	26 Jun 02 (actual)
T2 Design Complete	Contract documents submitted for procurement	15 Jan 03	15 Aug 02	15 Nov 02 (actual)
Begin Construction	Notice To Proceed Issued – Switch work	27 Jun 03	21 Nov 02	17 Jan 03 (actual)
Construction Complete	Final acceptance of all work	9 Jun 04	9 Dec 03	29 Mar 04
Project Complete	Project closed	30 Nov 04	10 Dec 03	29 Apr 04



II. Overall Project Cost Summary and Earned Value Analysis:

ORIGINAL BASELINE PROJECT COSTS (2001 dollars)				Latest Estimated Cost*	
1.1 General Construction				\$ 3,047,000	\$ 3,130,656
1.1.1	Construction W / 18 % O H P		\$ 2,323,000	\$ 2,728,681	
1.1.2	Construction Contingency	22 %	\$ 511,000	\$ 299,748	11 %
1.1.3	Construction G & A		\$ 83,000	\$ 102,227	
1.1.4	Escalation (4.6 %)	4.6 %	\$ 130,000	\$ 0	
1.2 Project Support				\$ 763,000	\$ 679,031
1.2.1	Project Engineering		\$ 465,000	\$ 461,687	
1.2.2	Project Support Contingency	21 %	\$ 99,000	\$ 87,653	19 %
1.2.3	Project Support G & A		\$ 166,000	\$ 129,691	
1.2.4	Escalation (4.6 %)		\$ 33,000	\$ 0	
Total Project Cost				\$ 3,810,000	\$ 3,810,000

*NOTE THAT 1.1 AND 1.2 HAVE BEEN REDISTRIBUTED (2/21/03) TO REFLECT USE OF MUCH OF THE ESCALATION, ACTUAL FIXED PRICE CONSTRUCTION COSTS, AND A HIGHER CONTINGENCY. Includes Supplemental Agreements 1, 2, 3, 4 and 5.

TPC Earned Value Analysis as of September 30, 2003 (based on earned value reports for September 2003):

1. The Schedule Variance is \$53,549
2. The Cost Variance is \$11,079. See the detailed earned value reports for more information.



ATTACHMENTS

See MI-31 website

<http://www-ap.fnal.gov/ecool/internal.html>

for the following:

TSR Report for 9-03

Earned Value Reports - Cost Reports and Graphs up to 9-03

Engineering Change Proposal List

More Photographs

Task Summary Report by Expenditure Type ("TSR")

[Enter Another Query](#)
Fermilab Business Services

Period End: SEP-03

Report on tasks: 1

A0201 - MI31 Ecooling Bldg

1 - MI31 Ecooling Bldg
Service Type: PL-EXST PRGM
SUPP-AIP

	Curr Month Costs	Curr YTD Costs	Curr YTD Obligations	Inception to Date Obligations	Inception to Date Costs	Reqs. in Process	Open Commitments
<u>Personnel Costs</u>							
FRINGE BENEFITS	243.92	-1,580.22	-1,580.22	2,191.06	2,191.06	0.00	0.00
OPTO ALLOC-MONTHLY	69.87	-57.85	-57.85	705.05	705.05	0.00	0.00
OPTO ALLOC-WEEKLY	13.18	-308.18	-308.18	79.14	79.14	0.00	0.00
OVERTIME	0.00	104.09	104.09	104.09	104.09	0.00	0.00
TIME WORKED -MONTHLY	755.92	-746.83	-746.83	8,899.24	8,899.24	0.00	0.00
TIME WORKED -WEEKLY	0.00	-3,570.57	-3,570.57	15.93	15.93	0.00	0.00
VAC EARNED ALLOC-MONTHLY	87.75	-77.54	-77.54	1,180.25	1,180.25	0.00	0.00
VAC EARNED ALLOC-WEEKLY	5.97	-386.80	-386.80	94.91	94.91	0.00	0.00
Personnel Costs	1,176.61	-6,623.90	-6,623.90	13,269.67	13,269.67	0.00	0.00

Materials & Services

CONSTRUCTION ENGINEERING	37,559.00	216,621.00	216,621.00	251,245.00	251,245.00	0.00	0.00
EXEMPT - CIVIL CONSTR.	1,182,486.00	1,182,486.00	1,182,486.00	1,182,486.00	1,182,486.00	0.00	0.00
EXEMPT - CIVIL CONSTRUCTION	-941,294.00	0.00	1,453,050.00	1,453,050.00	0.00	0.00	1,453,050.00
FEES	0.00	500.00	500.00	500.00	500.00	0.00	0.00
FREIGHT	0.00	5.57	5.57	5.57	5.57	0.00	0.00
MATERIAL PURCHASES	0.00	20,461.71	20,461.71	20,461.71	20,461.71	0.00	0.00
PHOTO/GRAPHIC SERVICES	11.00	78.00	78.00	78.00	78.00	0.00	0.00
STORES ISSUES	0.00	640.42	640.42	640.42	640.42	0.00	0.00
SUB-CONTRACT SERVICES	749.56	33,782.71	38,712.75	108,650.23	103,720.19	0.00	4,930.04

Period End: SEP-03

Report on tasks: 1

1 - MI31 Ecoooling Bldg
Service Type: PL-EXST PRGM
SUPP-AIP

	Curr Month Costs	Curr YTD Costs	Curr YTD Obligations	Inception to Date Obligations	Inception to Date Costs	Reqs. in Process	Open Commitments
<u>Materials & Services</u>							
T&M CONSTRUCTION SVCS.	0.00	8,678.12	8,678.12	8,678.12	8,678.12	0.00	0.00
T&M ELECTRICAL SERVICES	0.00	12,966.11	12,966.11	12,966.11	12,966.11	0.00	0.00
T&M PIPE FITTERS	0.00	2,050.86	2,050.86	2,050.86	2,050.86	0.00	0.00
T&M RIGGING SERVICES	36,149.96	45,405.56	81,283.84	81,283.84	45,405.56	0.00	35,878.28
Materials & Services	315,661.52	1,523,676.06	3,017,534.38	3,122,095.86	1,628,237.54	0.00	1,493,858.32
<u>Indirect Cost</u>							
CSS ALLOCATION	6,569.67	38,253.09	38,253.09	48,139.63	48,139.63	0.00	0.00
G&A ALLOCATION	2.80	50,059.51	50,059.51	62,275.66	62,275.66	0.00	0.00
G&A ALLOCATION-CSS PORTION	5,262.17	25,556.69	25,556.69	25,556.69	25,556.69	0.00	0.00
G&A ALLOCATION-M&S PORTION	4,264.90	16,203.04	16,203.04	16,203.04	16,203.04	0.00	0.00
MSA ALLOCATION	1,893.08	34,183.14	34,183.14	39,742.26	39,742.26	0.00	0.00
Indirect Cost	17,992.62	164,255.47	164,255.47	191,917.28	191,917.28	0.00	0.00
1 - MI31 Ecoooling Bldg SUBTOTAL:	334,830.75	1,681,307.63	3,175,165.95	3,327,282.81	1,833,424.49	0.00	1,493,858.32
DIST. TO ACCOUNTS REC'BL:	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNDISTRIBUTED BALANCE:	334,830.75	1,681,307.63	3,175,165.95	3,327,282.81	1,833,424.49	0.00	1,493,858.32

Period End: SEP-03

Report on tasks: 1

<u>REPORT TOTALS</u>							
TOTAL PROJECT/TASK:	334,830.75	1,681,307.63	3,175,165.95	3,327,282.81	1,833,424.49	0.00	1,493,858.32
TOTAL DIST. ACCTS REC'BL:	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL UNDIST BALANCE:	334,830.75	1,681,307.63	3,175,165.95	3,327,282.81	1,833,424.49	0.00	1,493,858.32

BCWP
MI-31 Spending Profile
WBS 1.1 and 1.2

		WBS 1.2 Project Support																WBS 1.1 Construction																					
Title Source Type	T2 Hanson Direct	T2 Hanson G&A	T2 FESS Chargeback	T2 FESS G&A	T3 FESS M&S	T3 FESS Chargeback	T3 FESS G&A	T3 FESS Chargeback	T3 FESS G&A	T3 PM Salary TX	T3 PM G&A	Monthly Totals	Cumulative Totals	T3 Whittaker Direct**	T3 Whittaker G&A	T3 Whittaker Incentive	T3 Whittaker G&A	T3 T&M Direct	T3 T&M G&A	T3 Procurement Direct	T3 Procurement G&A	T3 T&M Direct	T3 T&M G&A	T3 T&M Direct	T3 T&M G&A	T3 T&M Direct	T3 T&M G&A	T3 Procurement Direct	T3 Procurement G&A	T3 T&M Direct	T3 T&M G&A	T3 T&M Direct	T3 T&M G&A	Monthly Totals	Cumulative Totals				
	Mo-Yr																																						
F Y 0 2	Jul-02	\$25,000	\$4,250	\$10,000	\$3,000	\$300	\$51					\$42,601	\$42,601																					\$0	\$0				
	Aug-02	\$20,000	\$3,400	\$10,000	\$3,000					\$1,000	\$300	\$37,700	\$80,301																					\$0	\$0				
	Sep-02	\$24,587	\$4,180	\$11,800	\$3,540					\$1,000	\$300	\$45,407	\$125,708																					\$0	\$0				
	Oct-02			\$10,000	\$3,000	\$300	\$51			\$3,000	\$900	\$1,000	\$300	\$18,551	\$144,259																				\$0	\$0			
F Y 0 3	Nov-02	\$20,500	\$3,485	\$10,000	\$3,000					\$3,000	\$900	\$1,000	\$300	\$42,185	\$186,444																				\$0	\$0			
	Dec-02									\$3,000	\$900	\$1,000	\$300	\$7,800	\$194,244																				\$0	\$0			
	Jan-03									\$3,000	\$900	\$1,000	\$300	\$7,800	\$202,044																				\$12,309	\$12,309			
	Feb-03									\$3,000	\$900	\$1,000	\$300	\$7,800	\$209,844					\$10,396	\$1,913														\$12,355	\$24,664			
	Mar-03					\$200	\$34	\$12,000	\$3,720	\$11,000	\$3,410	\$1,000	\$300	\$31,664	\$241,508	\$0				\$66	\$12			\$20,537	\$3,257									\$78	\$24,742				
	Apr-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$274,048	\$92,204																			\$115,998	\$140,740			
	May-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$306,588	\$331,522																			\$331,522	\$472,262			
	Jun-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$339,128	\$320,000	\$80,341																			\$400,341	\$872,603		
	Jul-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$371,668	\$109,886																				\$110,419	\$983,022		
	Aug-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$404,208	\$253,407																				\$264,474	\$1,247,496		
Sep-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$436,748	\$104,898																				\$17,500	\$2,800	\$125,198	\$1,372,694	
F Y 0 4	Oct-03											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
	Nov-03											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
	Dec-03											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
	Jan-04											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
	Feb-04											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
	Mar-04											\$0	\$436,748	\$1,211,917	\$80,341	\$0	\$0	\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,372,694		
TOTALS		\$90,087	\$15,315	\$51,800	\$15,540	\$800	\$136	\$90,000	\$27,840	\$98,000	\$30,230	\$13,400	\$3,600					\$20,897	\$3,845	\$20,537	\$3,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$1,600	\$17,500	\$2,800	\$0	\$1,809,442			

WBS 1.2 Escalation and Contingency

Total for WBS 1.2 =	\$679,031	
Total Direct and G&A (above)=	\$436,748 *	
Project Support Escalation =	\$0	
Project Support Contingency =	\$242,283	70%

** NOTE BUDGETED COST OF WORK PERFORMED IS BASED ON WHITTAKERS LATEST T3 COST LOADED SCHEDULE.

WBS 1.1 Escalation and Contingency

Total for WBS 1.1 =	\$3,130,948	
Total Direct and G&A (above)=	\$1,372,694 *	
Project Support Escalation =	\$0	
Construction Contingency =	\$1,758,254	137%

Total Indirect=	\$92,661
Total Direct =	\$344,087

Total Indirect=	\$91,843
Total Direct =	\$1,280,851

ACWP
MI-31 Actual Spending Profile
WBS 1.1 and 1.2

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WBS 1.2 Escalation and Contingency

Total for WBS 1.2 =	\$679,031	
Total Direct and G&A (above)=	\$461,603	*
Project Support Escalation =	\$0	
Project Support Contingency =	\$217,428	Not Accurate, Reflects unused portions of Direct and Indirect Costs

NOTE: THIS SPREAD SHEET WILL NOT FOLLOW THE MONTHLY TSR DIRECTLY BECAUSE COST SHOWN UNDER WHITTAKERS T3 SUBCONTRACT ARE EARNED VALUE NOT WHAT HAS BEEN PAID OUT. SEE THE CHART BELOW FOR PAYOUT INFORMATION.

WBS 1.1 Escalation and Contingency

Total for WBS 1.10 =	\$3,130,948
Total Direct and G&A (above)=	\$1,401,389 *
Project Support Escalation =	\$0
Construction Contingency =	\$1,729,559 Not Accurate, Reflects unused portions of Direct and Indirect Costs

Total Indirect=	\$97,078
Total Direct =	\$364,524

Total Indirect=	\$96,326
Total Direct =	\$1,305,062

PAYOUT SUMMARY

Payroll #	Payout Date amount	PAYMENT MILESTONE	Completion DATE	Actual Comp DATE	AMOUNT	CUMULATIVE TOTAL PAYOUT	RETENTION 10% RETENTION	CUMULATIVE 10% RETENTION	% OF CONTRACT COMPLETE
Payroll #1	6/12/2003 \$399,141	1A	05/02/03	5/5/2003	\$118,384.00	\$118,384.00	\$11,838.40	\$1,183.84	15%
		1B	06/18/03	6/10/2003	\$280,757.00	\$399,141.00	\$28,075.70	\$3,914.10	
Payroll #2	7/1/2003 \$381,749	1C	06/25/03	6/15/2003	\$210,313.00	\$609,454.00	\$21,031.30	\$60,945.40	29%
		1D	06/27/03	6/27/2003	\$106,112.00	\$715,566.00	\$10,611.20	\$71,556.60	
		1E	07/25/03	7/1/2003	\$45,324.00	\$760,890.00	\$4,532.40	\$76,089.00	
Payroll #3	8/13/2003 \$180,404	1F	08/08/03	7/18/2003	\$89,708.00	\$850,598.00	\$8,970.80	\$85,059.80	36%
		1G	08/05/03	8/5/2003	\$87,682.00	\$938,280.00	\$8,768.20	\$93,828.00	
		1H	07/24/03	7/10/2003	\$3,014.00	\$941,294.00	\$301.40	\$94,129.40	
Payroll #4	9/3/2004 165,725.00	1I	08/28/03	8/18/2003	\$88,043.00	\$1,029,337.00	\$8,804.30	\$102,933.70	42%
		1J	09/08/03	8/28/2003	\$77,682.00	\$1,107,019.00	\$7,768.20	\$110,701.90	
		2A	09/25/03	9/8/2003	\$37,558.00				
		2A	10/31/03		\$40,617.00				
		2B	12/12/03		\$84,938.00				
		2C	11/18/03		\$32,988.00				
		2D	11/19/03		\$10,000.00				
		2E	12/16/03		\$150,160.00				
		2F	12/23/03		\$107,648.00				
		2G	12/1/2003		\$44,349.00				
		2H	01/16/04		\$144,435.00				
		2I	01/16/04		\$21,525.00				
		3A	02/04/04		\$288,578.00				
		3B	02/23/04		\$55,125.00				
		3C	02/23/04		\$3,937.00				
		3D	02/23/04		\$18,276.00				
		3E	03/02/04		\$74,694.00				
		4A	03/19/04		\$13,545.00				
		4B	03/08/04		\$22,295.00				
		4C	03/22/04		\$84,375.00				
		4D	03/24/04		\$34,463.00				
		4E	03/24/04		\$66,727.00				
		5A	10/02/03	9/28/2003	\$67,340.00				
		5B	10/28/03		\$69,144.00				
		6	03/29/04		\$20,800.00				
		7	03/29/04		\$35,000.00				
					\$2,635,536.00				

BCWS
MI-31 Anticipated Spending Profile
WBS 1.1 and 1.2

	Title Source Type	WBS 1.2 Project Support												WBS 1.1 Construction																		Monthly Totals	Cumulative Totals		
		ED&I						A				Monthly Totals	Cumulative Totals	Subcontract	Subcontract	Subcontract	Subcontract	Switch conduit	Switch conduit	Transformer Purchase	Transformer Purchase	Cable Tray	Cable Tray	Cabling	Cabling	Chiller	Chiller	Shielding Steel Fab	Shielding Steel Fab	Shielding Steel Inst.	Shielding Steel Inst.				
		T2 Hanson Direct	T2 Hanson G&A	T2 FESS Chargeback	T2 FESS G&A	T3 FESS M&S	T3 FESS Chargeback	T3 FESS G&A	T3 FESS Chargeback	T3 FESS G&A	T3 PM Salary TX			T3 PM G&A	T3 Whittaker Direct**	T3 Whittaker G&A	T3 Whittaker Incentive	T3 Whittaker G&A	T3 T&M Direct	T3 T&M G&A	T3 Procurement Direct	T3 Procurement G&A	T3 T&M Direct	T3 T&M G&A	T3 T&M Direct	T3 T&M G&A	T3 Procurement Direct	T3 Procurement G&A	T3 T&M Direct	T3 T&M G&A	T3 T&M Direct		T3 T&M G&A		
F Y O 2	Mo-Yr																																		
	Jul-02	\$25,000	\$4,250	\$10,000	\$3,000	\$300	\$51					\$42,601	\$42,601																		\$0	\$0			
	Aug-02	\$20,000	\$3,400	\$10,000	\$3,000					\$1,000	\$300	\$37,700	\$80,301																		\$0	\$0			
	Sep-02	\$24,587	\$4,180	\$11,800	\$3,540					\$1,000	\$300	\$45,407	\$125,708																		\$0	\$0			
F Y O 3	Oct-02	\$10,000	\$3,000			\$300	\$51					\$3,000	\$900	\$1,000	\$300	\$18,551	\$144,259											\$10,000	\$1,600			\$11,600	\$11,600		
	Nov-02	\$20,500	\$3,485	\$10,000	\$3,000							\$3,000	\$900	\$1,000	\$300	\$42,185	\$186,444															\$0	\$11,600		
	Dec-02									\$2,000	\$600	\$3,000	\$900	\$1,000	\$300	\$7,800	\$194,244															\$0	\$11,600		
	Jan-03									\$2,000	\$600	\$3,000	\$900	\$1,000	\$300	\$7,800	\$202,044					\$25,000	\$4,000	\$20,357	\$3,257							\$29,000	\$40,600		
	Feb-03									\$2,000	\$600	\$3,000	\$900	\$1,000	\$300	\$7,800	\$209,844															\$23,614	\$64,214		
	Mar-03					\$200	\$34	\$12,000	\$3,720	\$11,000	\$3,410	\$1,000	\$300	\$31,664	\$241,508	\$0																\$0	\$64,214		
	Apr-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$274,048	\$92,204																\$92,204	\$156,418		
	May-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$306,588	\$330,958																\$330,958	\$487,376		
	Jun-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$339,128	\$292,404	\$85,000																\$377,404	\$864,780	
	Jul-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$371,668	\$136,381																	\$136,381	\$1,001,161	
	Aug-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$404,208	\$177,390										\$10,000	\$1,600						\$188,990	\$1,190,151	
	Sep-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$436,748	\$153,322	\$20,000	\$0															\$17,500	\$2,800	\$193,622
F Y O 4	Oct-03							\$12,000	\$3,720	\$12,000	\$3,720	\$900	\$200	\$32,540	\$469,288	\$139,019																	\$139,019	\$1,522,792	
	Nov-03							\$10,000	\$3,100	\$12,000	\$3,720	\$900	\$200	\$29,920	\$499,208	\$120,253																	\$120,253	\$1,643,045	
	Dec-03							\$8,000	\$2,480	\$11,000	\$3,410	\$900	\$200	\$25,990	\$525,198	\$309,830																	\$309,830	\$1,952,875	
	Jan-04							\$8,000	\$2,480	\$11,000	\$3,410	\$900	\$200	\$25,990	\$551,188	\$398,108																	\$398,108	\$2,350,983	
	Feb-04							\$8,000	\$2,480	\$11,000	\$3,410	\$900	\$200	\$25,990	\$577,178	\$173,897							\$14,810	\$2,370	\$10,000	\$1,600							\$191,077	\$2,542,060	
	Mar-04							\$10,000	\$3,100	\$900	\$200	\$14,200	\$591,378	\$311,770																			\$323,370	\$2,865,430	
TOTALS		\$90,087	\$15,315	\$51,800	\$15,540	\$800	\$136	\$136,000	\$42,100	\$165,000	\$51,000	\$18,800	\$4,800			\$2,635,536	\$85,000	\$20,000	\$0	\$25,000	\$4,000	\$20,357	\$3,257	\$14,810	\$2,370	\$10,000	\$1,600	\$10,000	\$1,600	\$17,500	\$2,800		\$3,456,808		

Includes SA 1,2,3,4, and 5

WBS 1.2 Escalation and Contingency

Total for WBS 1.2 = \$679,031
Total Direct and G&A (above)= \$591,378 *
Project Support Escalation = \$0
Project Support Contingency = \$87,653 19%

** NOTE BUDGETED COST OF WORK SCHEDULED IS BASED ON WHITTAKERS
LATEST T3 COST LOADED SCHEDULE.

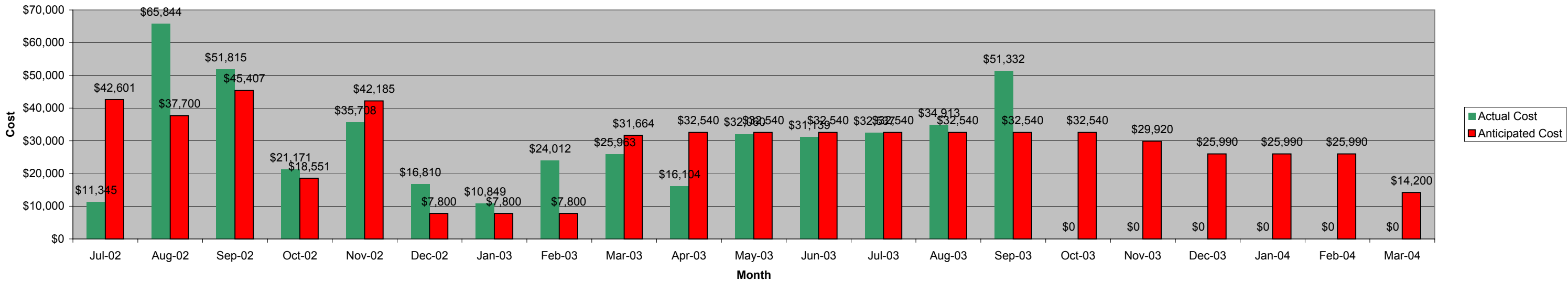
WBS 1.1 Escalation and Contingency

Total for WBS 1.10 = \$3,130,948
Total Direct and G&A (above)= \$2,865,430 *
Project Support Escalation = \$0
Construction Contingency = \$265,518 10%

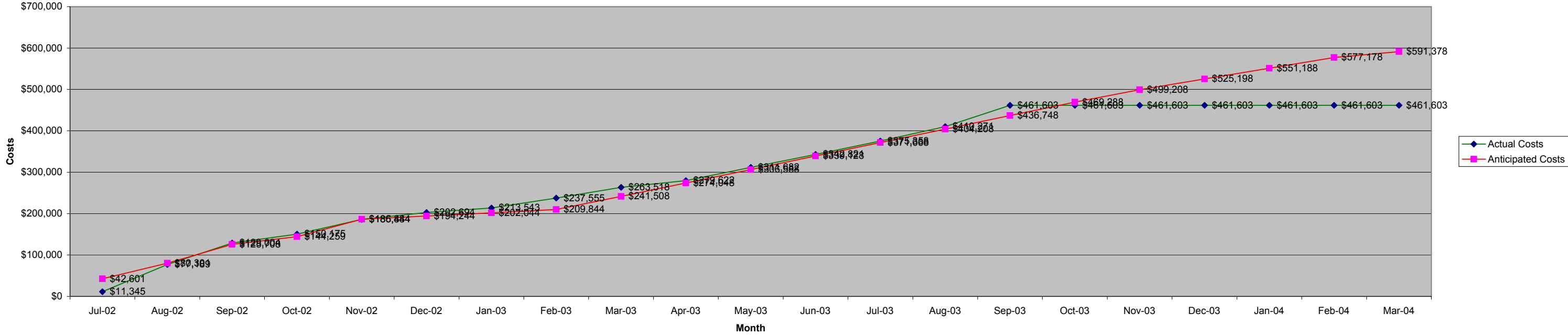
* Total Indirect= \$128,891
Total Direct = \$462,487

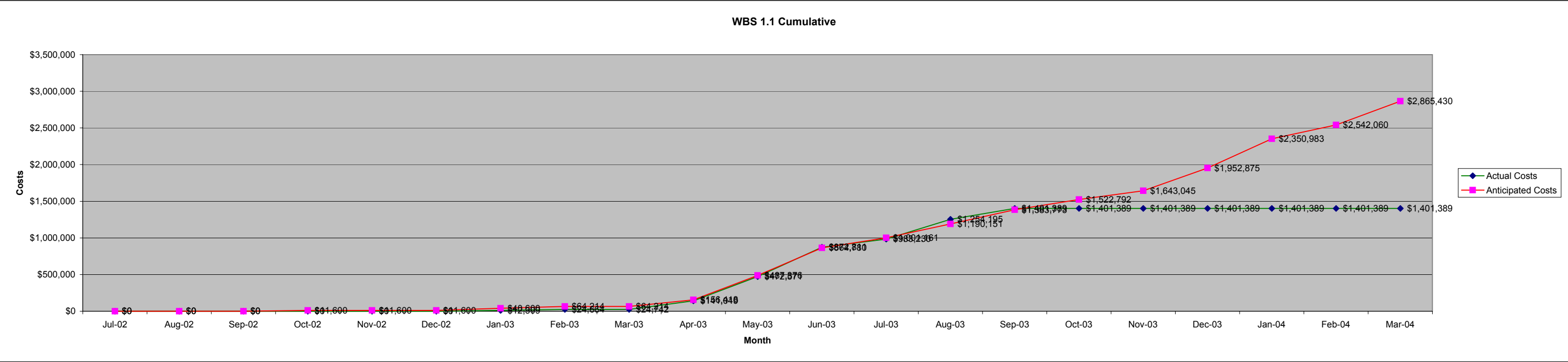
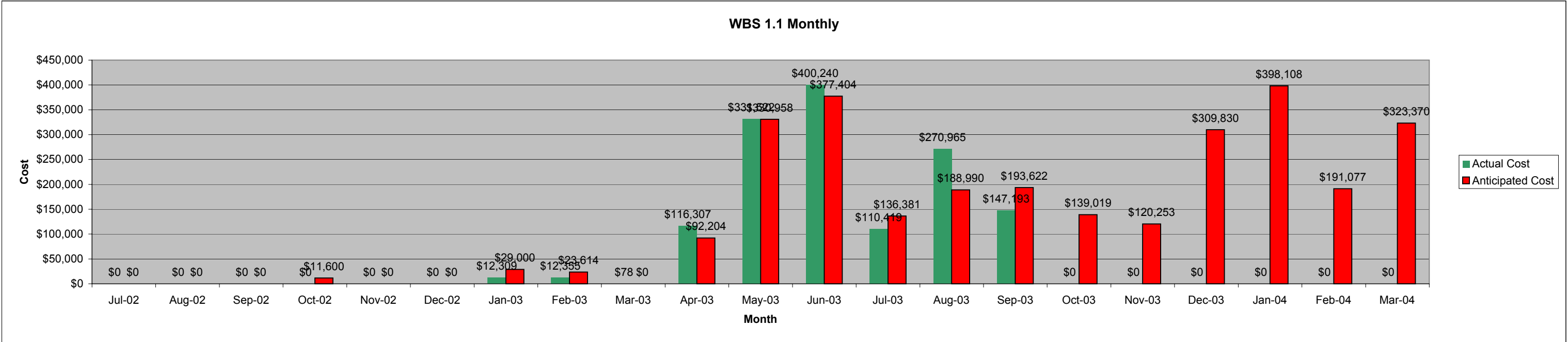
* Total Indirect= \$102,227
Total Direct = \$2,763,203

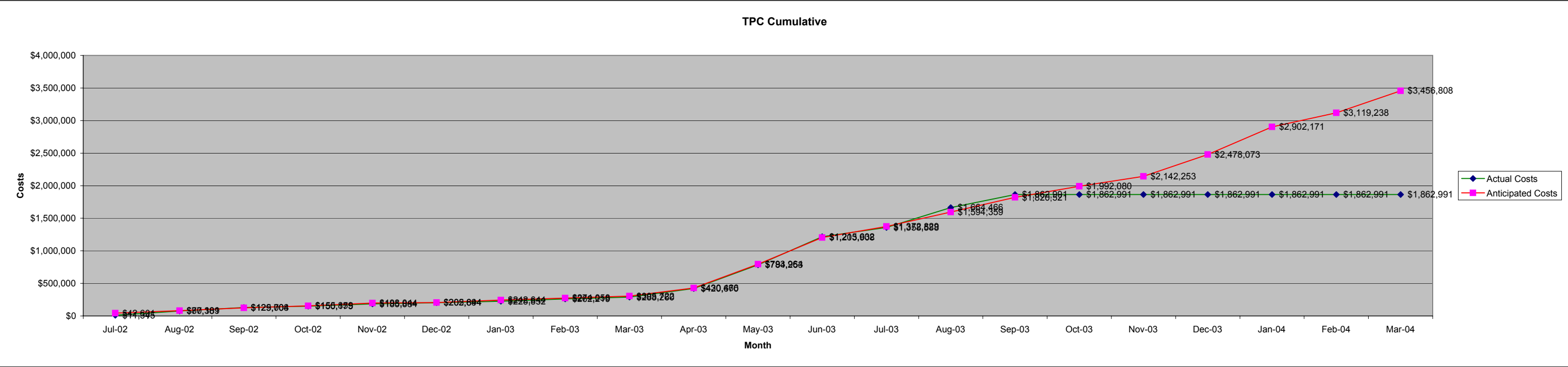
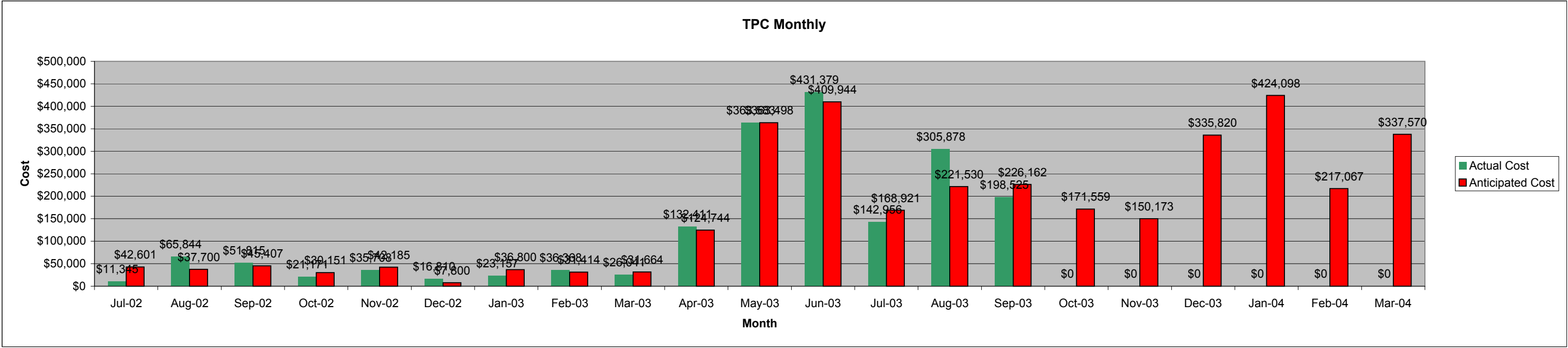
WBS 1.2 Monthly



WBS 1.2 Cumulative







10/15/2003

MI-31 Engineering Change List

ECP #	Description	Date Issued from CMO	Anticipated Credit, Extra or No Cost	Associated Sketch Number	Actual Credit, Extra or No Cost	Associated Payment Milestone	Overall Schedule Impact In Days	Whittaker Proposal Date	Accepted / Rejected or Pending	Req. #	Req. Approval Date	SA #	Date Work Complete	Comments
01	Holeless elevator instead of single cylinder elevator and add pit ladder	3/12/03	Extra - \$5000	SK-1...	\$19,390	3a	0	4/17/03	Accepted	163820	5/6/03	2		
01a	Full width doors on elevator	3/12/03	Extra - \$3000	SK-1...	\$3080	3a	0	4/17/03	Accepted	163822	5/6/03	2		
02	Watermain valve clarifications/ modifications and installation of flushing hydrants.	3/12/03	No Cost	SK-2	\$1665	1e	1	3/19/03	Accepted	163549	4/15/03	1	7/15/03	
03	Reduce shut down schedule from 6 weeks to 5 weeks	3/12/03	Extra- \$12,000	None	\$7527	5a	0	3/28/03	Rejected					May be required in the future. Directorate asked that we sit on this one for a while.
04	Earth retention changes – including bottom of soldier piles to elevation 698 and shielding distance of 18.4 feet.	3/12/03	No Cost	SK-4	\$0	1b	1	3/28/03	Accepted	---	4/4/03	1	4/30/03	
05	Temporary Bulkhead Door	3/21/03	Extra - \$7000	SK-5	\$10,231	5a	1	4/14/03	Accepted	163802	4/25/03	1	9/11/03	
06	Modifications to MI Ducts	6/26/03	Extra – \$30,000	SK-6	\$46,117	5a	5	7/21/03	Accepted	165776	8/1/03	4		
07	Install 6 Atlas Piles at MI-30	From Subcon tractor	Extra - \$25,000	See Excavation Plan Submittal	\$26,180	1a	3	3/28/03	Accepted	163420	5/1/03	1	5/7/03	Rush Requisition, added because excavation plan required supporting building. Approval by CCB required
08	Credit for Wall Panel Coating change – three coat system to two coat system	4/22/03	Credit – \$3500	None	-\$3500	2h	0	4/25/03	Accepted	--	4/25/03	2		
09	Credit for substitute damp proofing product	4/22/03	Credit- \$7000	None	-\$7500	1i	0	4/25/03	Accepted	--	4/25/03	2		
10	Temporary Work Platform on MI-30	5/5/03	Extra - \$3500	Page 1 of 1	\$4610	1b	1	5/14/03	Accepted	164321	5/19/03	3	6/1/03	Field Directed on 5/15/03 - Required for maintenance of MI-30 HVAC units
11	Relocation of Building Sump	6/10/03	No Cost	SK ECP-10	\$0	1d	0	6/24/03	Approved	--		4	6/7/03	
12	Rad. Detector Platform/ Relocation	From Subcon tractor	-	None	\$733		0	6/19/03	Approved	165153	6/27/03	4	6/14/03	Field Directed , noted incorrectly in the requisition as ECP 11. Time and Material.
13	Extra for Concrete Mix Design 71	From Subcon tractor	\$7300	None	\$5625	1k	0	9/12/03	Approved	165389	7/14/03	4	8/29/03	See letter from Mike Botts on 6/25/03
14	Connecting Enclosure Mods	7/28/03	\$1500	SK-14	\$1755	5b	0	9/02/03	Approved	166707	9/9/03	4		
15	Credit for PVC in lieu of Rigid Conduit for ducts on sheet E-6	From Subcon tractor	\$10,000	None	-\$10,000	5b	0	9/02/03	Approved			4		
16	Topsoil for MI Stockpile	9/12/03	\$10,000	None	\$10,380		0		In Process					
17	Painting of Cast In Place Walls in Lieu of Concrete Sealer	9/12/03	\$2500	None	\$3362		3		In Process					
18	Time extension for Shielding Steel Placement	From Subcon tractor	\$0	None	\$0		6		In Process					